

**POLLUTION REPORT****I. HEADING**

Date: December 10, 1999

Subject: Industrial Highway/Gary Municipal Airport Oil Release Site,
Gary, Lake County, Indiana

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POLREP: #6 - (Reporting period 11/8/99 thru 12/3/99)

II. BACKGROUND

CERCLIS ID No: IND067469437

Site No: Z590

FPN: 098022

IAG No: RW69947898-01-0

ID No: 99HR05F50203D

Start Date: 4/7/99

Completion Date: N/A

USGS Hydro Unit: 04040001

Task Order No: 9801-05-025

Response Authority: OPA Fund-lead

NPL Status: N/A

State Notification: IDEM

Mobilization Date: 4/8/99

Action Memo Status: N/A

III. SITE DESCRIPTION

- A. Incident Category:** Time-Critical Removal Action - Oil Release Hazard
B. Site Location: Gary, Lake County, Indiana
LAT: 41° 37' 13" North; LONG: 87° 25' 14" West

1. Site Description:

The site is a drainage ditch located along the western boundary of the Gary/Chicago Municipal Airport in Gary, Indiana, that has been impacted by migrating oil and oil-contaminated groundwater. Previous POLREPs contain additional details on the site, the source of the pollutants and the downstream areas that may be affected by discharge from the ditch.

2. Description of threat:

Petroleum-contaminated discharge from the ditch may impact downstream receptors, which include a wetland area and the Grand Calumet River. Additional details can be found in previous POLREPs.

C. Preliminary Assessment

The release hazard was initially documented in U.S. EPA site assessment reports prepared in 1992. A pump and treat groundwater system, including an oil and water separator, was installed to address the contamination. However, the system was shut down in 1995, and was not reactivated until 1999. Additional details are contained in the previous site POLREPs.

IV. RESPONSE INFORMATION

A. Situation

Refer to POLREP #1 (dated 4/12/99), POLREP #2 (dated 5/12/99), POLREP #3 (dated 6/14/99), POLREP #4 (dated 10/13/99), and POLREP #5 (dated 11/10/99) for details of the response actions conducted from 4/7/99 to 11/7/99.

1. Current situation and status of response actions:

On 11/1/99, Environmental Quality Management, Inc. (EQM), the U.S. EPA Emergency Response and Remedial Service (ERRS) contractor, began to excavate the oil contaminated soil from the ditch, starting near the west end of Runway 12-30, and moving northeast towards the product recovery system. From 11/7/99 through 12/3/99, the primary remedial activity involved the excavation and stabilization of contaminated soils from the portion of the airport's perimeter ditch which parallels the airport's western boundary (the north-south ditch) and the portion that parallels runway 12-30 at its western end (the east-west ditch). Approximately 710 linear feet (ft.) of material was excavated from the north-south ditch, while approximately 400 ft. of material was excavated from the east-west ditch. Based on average excavated depths of four

feet for the north-south ditch and two feet for the east-west ditch, approximately 3,160 cubic yards (yd³) and 450 yd³ were excavated from the respective ditch sections. On 11/9/99, EQM began using lime kiln dust to stabilize the excavated material instead of fly ash at a mix ratio of 10 percent (%) lime kiln dust to 90% excavated material by volume. EQM mobilized 315.4 tons of lime kiln dust in thirteen loads to be used for material stabilization from 11/10/99 through 12/2/99. The in-situ mixing of lime kiln dust and the material from the ditch resulted in the pH of the water in ditch being elevated from a pH of 7 standard units (S.U.) to a pH of 12 S.U. Subsequently, EQM modified site procedures to perform stabilization in the staging area and a bench-scale treatment study was performed. As a result of the bench-scale study, a total of 4.5 gallons of 31.45% Muriatic acid was mixed with approximately 30,000 gallons of water in the ditch from 11/19/99 through 11/23/99. This treatment and an undetermined volume of stormwater runoff resulted in the reduction of the elevated pH levels to an acceptable pH of 7 S.U. On 11/19/99, EQM began shipping the stabilized material offsite for disposal at the Forest Lawn Landfill in Three Oaks, Michigan. From 11/19/99 through 12/1/99, a total of 3,164.89 tons of stabilized material was shipped offsite in 135 loads, with an average load weight of 23.44 tons. On 11/30/99, National Industrial Maintenance, Inc. of East Chicago, Indiana, initiated and completed cleaning three culverts located along the length of the ditch. On December 2, 1999, EQM began excavating additional material from the north-south ditch in response to the analytical results from a confirmation sample being above the mandated Indiana cleanup limit of 100 parts per million of total petroleum hydrocarbons.

A product recovery system is operational at the Industrial Highway site to recover oil-contaminated groundwater migrating onto the site. The system is comprised of four recovery wells and an oil/water separator unit. A total of 1,022,400 gallons of oil-contaminated groundwater have been treated since the reactivation of the system on 9/24/99. Between 11/7/99 and 12/3/99, approximately 494,400 gallons of contaminated groundwater has been captured by the recovery system and treated. Since the re-initiation of the system, approximately 4,000 gallons of oil has been recovered and shipped offsite to Beaver Oil Company, Inc. for reuse in blended fuel product.

B. Planned Removal Actions

The currently planned future removal actions are as follows:

1. Continue operating the product recovery system;
2. Complete additional excavation in north-south ditch;
3. Stabilize the excavated material with lime kiln dust;
4. Ship the stabilized material offsite for disposal;
5. Restore the staging area to previous condition;
6. Grade, seed, straw and install erosion control blankets along the banks of the ditch;
7. Complete site cleanup activities;
8. Perform investigative excavation in the alleged pipeline area identified between the west base of the railroad embankment and the Conservation Chemical site; and
9. Demobilize equipment and material from the site.

C. Key Issues

In the continued effort to determine the source of the contamination and to prevent additional contamination from migrating onto the site, EQM will excavate a trench along the western base of the railroad embankment approximately 450 feet long to a maximum depth of five feet. The goal of the investigation is to determine if oil is migrating onto the Industrial Highway site through abandoned pipelines that originate at the former Barry Oil facility.

V. COSTS

Extramural Costs:

Total Cleanup Contractor Costs	\$ 432,000.00
START	\$ 24,000.00

TOTAL, EXTRAMURAL COSTS:	<u>\$ 456,000.00</u>
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Intramural Costs:

Direct Costs (Region, HQ, ERT)	N/A
Intramural Indirect Costs	N/A

TOTAL, INTRAMURAL COSTS:	N/A
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TOTAL SITE COST	PENDING
PROJECT CEILING	\$ 620,000.00
PROJECT FUNDS REMAINING AS A PERCENTAGE	26.5%

* The above accounting of expenditures is an estimate based on amounts known by the OSC at the time of preparation of this report. The cost accounting data shown in this report does not necessarily represent the exact monetary figures which the U.S. Government may include in any claim for cost recovery.

VI. DISPOSITION OF WASTES

<u>Material</u>	<u>Quantity</u>	<u>Disposal Facility</u>	<u>Dates Shipped</u>
Oil	1,300 gallons	Beaver Oil Company Gary, Indiana	9/24/99
Contaminated soil	3,165 tons (135 loads)	Forest Lawn Landfill Three Oaks, Michigan	11/19-12/1/99